

In the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A hip prosthesis, comprising a shaft ~~[(1)]~~ which is configured to be anchored in ~~[[the]]~~ a medullary canal of ~~[[the]]~~ a femur and ~~[[whose]]~~ has a distal portion ~~[(7),]~~ which is configured to be anchored in ~~[[the]]~~ a diaphysis,

~~[[has]]~~ the shaft having a core cross- section ~~[(12)]~~ which tapers toward ~~[[the]]~~ a distal end and which ~~, at least on the lateral side (19) and the medial side (20),~~ has longitudinal ribs ~~[(16)]~~ on a lateral side (19) and a medial side whose height increases from a proximal portion of the shaft to a distal end portion of the shaft, ~~characterized in that~~

the shaft core cross-section at a distance of 1 cm from the distal end ~~(11)~~ is portion being substantially rectangular, with an axis ratio of at least ~~[[1:5]]~~ 1:4, and, ~~at least near [[its]]~~ a distal end, ~~[[has]]~~ having a rib ~~[(21)]~~ on each of its two lateral edges, the height of which ~~[[rib]]~~ is on average under 2 mm, the boundary of the shaft core cross-section between the two ribs (21) located on the lateral edges not protruding further laterally from the prosthesis than these the two ribs located on the lateral edges.

2. (Currently Amended) The prosthesis as claimed in claim 1, ~~characterized in that~~ wherein a rib provided between the two ribs ~~[(21)]~~ located on the lateral edges that protrudes from the prosthesis by not more than 2 mm further laterally than ~~these the two ribs located on the lateral edges.~~

3. (Currently Amended) The prosthesis as claimed in claim 1 or 2, ~~characterized in that~~ further comprising a rib is ~~[[also]]~~ provided on each of the medial edges.

4. (Currently Amended) The prosthesis as claimed in ~~one of claims 1 through 3~~ claim 1 or 2, ~~characterized in that~~ wherein a rib provided between a rib ~~[(21)]~~ provided on the lateral edge and a rib located on the medial edge protrudes not more than 2 mm in ~~[[the]]~~ a ventral or dorsal direction from the prosthesis than the ribs arranged on the lateral and medial edges.

5. (Currently Amended) The prosthesis as claimed in ~~one of claims 1 through 4~~ claim 1

~~or 2, characterized in that the~~ wherein a shaft core cross-section at the proximal end ~~[[(9)]]~~ is substantially rectangular~~[[,]]~~ with an axis ratio of at least ~~[[1:4]]~~ 1:5.

6. (Currently Amended) The prosthesis as claimed in ~~one of claims 1 through 5~~ claim 1 or 2, characterized in that the ribs ~~are made rough~~ have roughened surfaces.

7. (Currently Amended) The prosthesis as claimed in ~~one of claims 1 through 6~~ claim 1 or 2, ~~characterized in that the~~ wherein a tapering of the core cross-section along a length of at least 4 cm is on average at least $8 \text{ mm}^2/\text{cm}$ of length, ~~preferably over $10 \text{ mm}^2/\text{cm}$ of length~~.

8. (Currently Amended) The prosthesis as claimed in ~~one of claims 1 through 7~~ claim 1 or 2, ~~characterized in that the~~ wherein a reduction in ~~[[the]]~~ cross-sectional dimension in ~~the LM~~ a latero-medial direction of the distal shaft portion ~~[[(7)]]~~ along a length of at least 4 cm of the distal shaft portion is on average at least $0.5 \text{ mm}/\text{cm}$ of length, ~~preferably more than $0.8 \text{ mm}/\text{cm}$ of length~~.

9. (Currently Amended) The prosthesis as claimed in ~~one of claims 1 through 8~~ claim 1 or 2, ~~characterized in that~~ wherein the rib height increases from the proximal end ~~[[(9)]]~~ of the distal portion ~~[[(7)]]~~ to ~~[[its]]~~ the distal end ~~[[(11)]]~~ of the distal portion from less than 0.5 mm to 0.5 to 1.5 mm.

10. (New) The prosthesis as claimed in claim 7, wherein a tapering of the core cross-section along a length of at least 4 cm is on average over $10 \text{ mm}^2/\text{cm}$ of length.

11. (New) The prosthesis as claimed in claim 8, wherein a reduction in cross-sectional dimension in a latero-medial direction of the distal shaft portion along a length of at least 4 cm of the distal shaft portion is on average more than $0.8 \text{ mm}/\text{cm}$ of length.